

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73676 A1

(51) International Patent Classification⁷: F16F 9/05,
B60G 11/28

(21) International Application Number: PCT/US99/11772

(22) International Filing Date: 28 May 1999 (28.05.1999)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): THE GOODYEAR TIRE & RUBBER COMPANY [US/US]; D/823, 1144 East Market Street, Akron, OH 44316-0001 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): TROWBRIDGE,

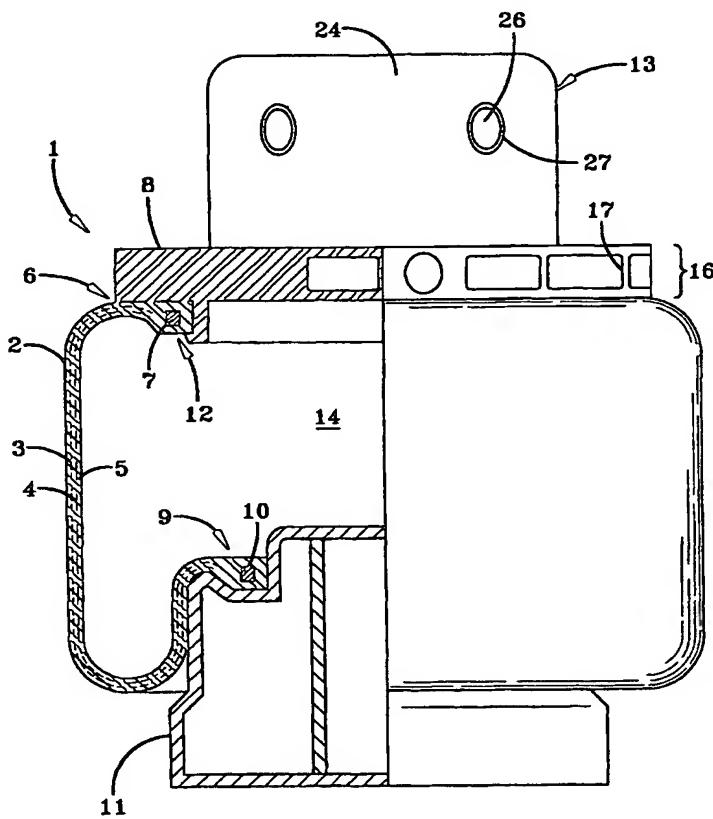
(74) Agent: KRAWCZYK, Nancy, T.; D/823, The Goodyear Tire & Rubber Company, 1144 East Market Street, Akron, OH 44316-0001 (US).

(81) Designated States (national): AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

[Continued on next page]

(54) Title: AIR SPRING UPPER RETAINER



(57) Abstract: An air spring (1) has a cylindrical flexible air sleeve (2) secured at each end to form a fluid chamber (14). One end (6) of the sleeve (2) is secured to a retainer (8). The retainer (8) has a ribbed reinforcement structure (16) which allows the air spring (1) to be directly mounted to a moveable part of a vehicle or other machinery. The retainer (8) has an extending mounting means (13) on one side of the reinforcement structure (16) and a bead seating surface (12) adjacent to the reinforcement structure (16).

WO 00/73676 A1